

# EXHIBIT 1

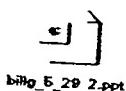
Amy Johnstone (LCA)

**From:** Jim Durkin  
**Sent:** Wednesday, May 28, 1997 6:24 PM  
**To:** Bob Muglia (Exchange)  
**Cc:** Anthony Bay  
**Subject:** billg\_5\_29\_2.ppt

Here's the slideset for the Billg meeting tomorrow. Abay, I have not yet incorporated the changes from our 5 pm meeting, but I told Bob I'd send him a copy.

I will do another draft within the next 2-3 hrs and send them around to both of you.

Given that our meeting with Billg is now only 1/2 hr, what do you recommend I do with the slides to adjust?



billg\_5\_29\_2.ppt

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# NetShow Review

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MS-CC-BU 9012231

# Assumptions

- ◆ The Internet will be the fourth broadcast network--  
augment and replace traditional broadcast forms
- ◆ Internet/Intranet broadcast will be very broad space
  - ◆ Business, personal, and traditional broadcast
- ◆ Driving Microsoft software and standards into the  
pressure points of this space (client, server,  
standards) is critical

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# We Must Be The Dominant Software Platform In This Space

- ◆ Establish a single, universal client for local, http, and streaming media playback
- ◆ Drive key standards: file format + wire protocols
- ◆ Win media server market

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# Universal Client

## How we get there

- ◆ Stop development on NetShow client after NetShow v.2
- ◆ Use DirectShow as NetShow v.3 client
  - ◆ 2 going forward options (still discussing with DirectShow team):
    - ◆ 1. DirectShow takes over all NetShow client work (incl. Filters)
      - ◆ NS lending 1-2 client dev, 1 client test, and 1/4 client PGM to DS to get client work done by IE 4 (see issues slide)
      - ◆ DS team takes over NS cross platform contractors after v.2 is done
      - ◆ NS maintains ownership of NS-specific filter components (i.e., network)
    - ◆ 2. DirectShow treats NetShow as ISV and NetShow does filter work only
      - ◆ ASF + DS client is understaffed on our side
- ◆ Synchronize Codec licensing model
  - ◆ License ACM\VCM for legacy, get filter commitment <DONE>
  - ◆ Anticipate \$15 MM for licensing codecs and company-wide strategic codec licensing for FY 1998 (\$5 MM projected to be ISBU share of costs)

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# Winning The Multimedia File Format Battle

## ASF 1: Today's file format for streaming media

- ◆ Push ASF v.1 now (internally and externally)
- ◆ Get top 6 multimedia tool vendors to support as their default format
  - ◆ Adobe, Macromedia, Assymetrix, Avid, Sound Forge, Vivo
  - ◆ Program being proposed by DRG
- ◆ Coopt other streaming server vendors to support
  - ◆ AM team getting PN to abandon RMFF, get Vxtreme to abandon Vx, get Vivo to abandon VIV

## Deliver ASF v.2 specs & definition by YE '97

- ◆ Create, edit, play, and serve all content
- ◆ Create specs, API's, and libraries ASAP
- ◆ Build ASF v.2 with industry collaboration (PN, etc.) this summer
- ◆ Introduce ASF into Standards bodies
  - ◆ ISO MPEG 4 systems
  - ◆ W3C
  - ◆ Dedicating 1 person to driving for company (Eric Fleischman)

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# Overall SERVER Objectives In Streaming Media Space

- ◆ **Integrate** with BackOffice and SiteServer
  - ◆ Ship integrated product with Olympus
  - ◆ Dovetail into the server suite sales
- ◆ **Out-compete** other players in the market
  - ◆ Deliver platform for commercial, business, and personal broadcasts
  - ◆ Deliver best, most standards-based, most integrated server
- ◆ **Gain Market Share**
  - ◆ Become a player in the 1997 market by shipping at least 30k servers
    - ◆ Top competitive products will ship 50k for fee servers in 1997
    - ◆ Total market will be 100k
  - ◆ Win Internet trophy accounts needed for intranet pull through to occur
    - ◆ Win top media-enriched sites for visibility and pull through sales in corporates

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# Our Competition: Progressive Networks

- ◆ Statistics

- ◆
  - ◆ 265 people (125 engineers, 140 marketing/sales)
  - ◆ \$50 MM revenue in '96
  - ◆ 15,000 servers in '96, 30k for fee clients/mo
  - ◆ 40 MM players (Real Video--2 MM players in first month of beta)
  - ◆ 2400 content sites
  - ◆ 600 developers at their RMA PDC
- ◆ Where They Are going
  - ◆ RTM of Real Video in June
  - ◆ Will support RTSP
  - ◆ RTP/RTCP will follow by E.O.Y. after RTSP is ratified
  - ◆ PN is pushing meta file & session description format as W3C standard
  - ◆ Teamed with Starlight to address high end of streaming market
  - ◆ PN is building their own distribution network for delivering content over quality guaranteed connections
  - ◆ Expect Netscape to license Real Video and bundle with Suite Spot and Constellation
  - ◆ PN has delivered a major, buildable architecture for third parties

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# Where Our Competition Is Going, cont'd

- ♦ Where they are vulnerable
  - ◆ Codecs and scaleable codecs
  - ◆ Tools
  - ◆ Admin & content management
  - ◆ Multicast support and administration
  - ◆ High end server story
- ♦ Oracle
  - ◆ Oracle Video Option for Oracle7 v. 7.3
  - ◆ Positioned as component of Universal Server
  - ◆ A non-player in the market and we're not hearing much about it in Oracle8
  - ◆ However, Oracle is rumored to be interested in buying Vxtreme or VDO
    - ◆ Sources...Vivo, Vxtreme, consultant
- ♦ Others
  - ◆ Small guys - Xing, VDO, Vosaic, Liquid Audio, Starlight, Vivo, etc..
  - ◆ Not very serious - Netscape (except with PN), IBM, SGI

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# NetShow "Holes" Today

## Standards Support

- ◆ Need to move the entire product to RTP/RTCP
  - ◆ Need to move the control protocol to RTSP
  - ◆ Radically step up ASF evangelism and make it a standard
- ## Codecs
- ◆ Implement an adaptive codec server architecture

- ◆ License existing best of breed codecs (most frequent selection criteria:  
sound & picture quality) & get a few strategic long term partners
- ◆ Drive MPEG 4 standards (systems as well as video) and spin technology off to  
our partners (Intel, Vivo, FhG) for commercial implementations

## Network Broadcast Infrastructure

- ◆ Clusters and farms
- ◆ Meta server
- ◆ Layered and reliable multicast

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# NetShow "Holes", Today

- ◆ Management
  - ◆ Admin, content management, network management tools
  - ◆ Particularly lacking multicast management tool set
- ◆ Tools
  - ◆ Tools that take advantage of latest featureset needed for customers AND ISV's
    - ◆ ISV cycles don't match ours
    - ◆ Need to resource (or build a better) Winase particularly for multicast
  - ◆ Cross Platform Story (client)
    - ◆ Need Mac, Win 3.1, Unix, and Netscape Plug-in clients
  - ◆ Need integration with Site Server and BackOffice

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# Options To Fill The Holes

- ◆ Current Plan of record- flat headcount growth
  - ◆ NS integration with S.S. by YE '97
  - ◆ ASF 2.0 libraries by Q2 '98
  - ◆ NS v.3 rewrite and deliver by Q4 '98
- ◆ Significant staff up to compete
  - ◆ License technology
    - ◆ Staff to deliver above much sooner (20-30 people)
    - ◆ Drawback--it's very difficult to hire in this space (years)
  - ◆ Buy a third party for technology, people and IP
    - ◆ Vxtreme is by far the most viable
    - ◆ Have considered and investigated VDO, Liquid Audio, Vivo, Xing, PN, and others
- ◆ Concede and cut the best deal possible with PN
  - ◆ License Rob our technology (NetShow, Tiger, codecs, MPEG 4)
  - ◆ Cut deal that puts us in 50% control of pressure points (format, protocol,
  - ◆ Bundle Rob's product with extensive rights

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# Vxtreme

- ◆ Reason to buy them
  - ◆ Technology that fills our holes
  - ◆ Top notch people
  - ◆ IP in critical areas
- ◆ Founded in Dec. 1995
- ◆ Currently 89 people (49 engineers)
- ◆ Principles:
  - ◆
  - ◆
  - ◆
- ◆ Chief scientist: Anoop Gupta (Stanford PhD)
- ◆ CTO: Navin Chaddha (Stanford PhD)
- ◆ CEO: Pete Mountainous
- ◆ Investors: Cisco, Diamond, ...

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# Technology: What They Have That We Don't

- ◆ Standards-based- Pure RTP, RTCP today [9-12 months behind]
- ◆ Scalable, layered codec and architecture [9-12 months behind]
- ◆ Meta server & load balancing [9-12 months behind]
  - ◆ Content management and admin [9-12 months behind]
  - ◆ MPEG 4 SYSTEMS assets
- ◆ 2nd generation composition tool
- ◆ Cross platform servers

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# Technology: What We Have That They Don't

- ◆ Tiger
- ◆ 2nd generation interleave (ASF & engine)
- ◆ 2nd generation multicast admin (channel paradigm)
- ◆ MPEG 4 CODEC investments
- ◆ Third party tools story
- ◆ Fixed bit rate codec assets

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# Technology, cont'd

## ◆ Overlap With Us

- ◆ End user experience **VERY** similar (illustrated audio)
- ◆ Live encoding engines similar
- ◆ General resource investments in clients, servers, and admin
- ◆ Value To Us
  - ◆ Gets us 9-12 months ahead in several **key DEFENSIVE** category (Standards, XPlatform)
  - ◆ Gets us 9-12 months ahead in **key OFFENSIVE** categories (**MPEG 4**, scalable codec, content mgmt, meta servers)

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# The Intellectual Property: Filed

- ◆ Scaleable codec technology (transport, blocking, encoding)
  - ◆ "Synchronized Annotations" aka ASF [MS, PN, Netscape]
  - ◆ VCR functions [everyone + RTSP :)]
  - ◆ Autodetection of protocols and failover [MS]
  - ◆ Meta servers [MS\*, PN]
  - ◆ UDP resend [MS\*, PN]
  - ◆ Interleave file from HTTP source [MS]
  - ◆ Mux multiple streams to one port [MS\*\*]
  - ◆ 8 Mbps across parallel port
  - ◆ Others in process
  - ◆ codec on hardware and very vague on others

MS=implemented in NS now, MS\*= NS v.3, MS\*\*=NS v.4

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# How We'd Integrate Vxxtreme: Personnel

- ◆ CEO & VP Mktg claim 95% would relocate to Redmond
- ◆ Move personnel to Redmond
- ◆
- ◆
- ◆
- 89 total employees
- 49 Engineers
  - 3 client dev
  - 9 server dev
  - 6 tools/libraries dev
  - 7 compression/encoders dev
  - 4 net dev
  - 2 Custom dev
  - 10 Test
  - 7 Tech support/onsite support
  - 1 doc
- 10 Mktg & Evangelism
- 18 Systems Engrs & sales
- 12 F&A

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# How We'd Integrate Their Technology

- ◆ Ship NetShow v.2 as is (and free) next month
- ◆ Stop work on NS code base after 2.0
- ◆ NetShow "Xtreme" by Site Server ship based on Vxtreme base
  - ◆ Retrofit Vxtreme with fixed bit rate codecs, ASF, RTSP, and multicast admin
  - ◆ Do as much Site Server Integration as possible (admin, setup, other)
- ◆ Break free the bulk of resources from both teams ASAP to begin working on fully integrated NetShow "Xtreme" to ship early next year
  - ◆ Standard's based
  - ◆ Fully integrated (Tiger and SS/B.O.)
  - ◆ ASF v.2
- ◆ Issue: Site Server integration and timeframe
- ◆

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# How We'd Integrate The Technology

- ◆ Recommendation based on today's information: A
  - ◆ Gives us an excuse to move to a for fee model
  - ◆ Vxtreme's code base is most likely closer to NetShow V.3 than NetShow v.2's is
- ◆ Vxtreme's architecture is more amenable to what we'd need to add to it than what we need to add to NetShow's
  - ◆ LOTS of unknowns, though
    - ◆ How hard will it be to integrate with Site Server
    - ◆ How good is their code really?
    - ◆ Impact on NetShow team (I think I've managed this, but...)

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# How We'd Integrate The Technology

- ◆ **Hardware**
  - ◆ Our hardware team would take over the deal and productization or allow existing channel partner to drive
  - ◆ Need at least 1 hardware head to deliver
- ◆ **Unix servers**
  - ◆ Do minor retrofitting for ASF and hand over to third party (Xing or Apache most likely)

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## Next Steps

- ◆ Approval to go to LOI stages with range up to \$75 MM
- ◆ Bring key Vxxtreme people to talk to Paulma

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**Karl Neumann (LCA)**

**From:** Karl Empey  
**Sent:** Friday, June 06, 1997 10:42 AM  
**To:** Jim Durkin  
**Subject:** NetShow gaining momentum ?

I heard that Bill sent out a mail yesterday saying that NetShow was now a high priority. I can only assume this bodes well for the acquisition. Any other info you can share ?

Karl

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**Karl Neumann (LCA)**

**From:** Paul Maritz  
**Sent:** Sunday, June 15, 1997 8:46 PM  
**To:** Bill Gates; Greg Maffei  
**Cc:** Bob Gomulkiewicz (LCA)  
**Subject:** URGENT - BILLG please read: PN & Vxtreme

Bill - I don't know if you have been reading mail but we have been talking to robg over weekend and are discussing deal which is in first mail attached/ below.

We have been trying to see if we could do deal with both PN & Vxtreme, and we need your opinion on whether you agree to doing deal with both PN & Vxtreme as it would mean large sums: PN deal is \$30M cash and \$60M investment in PN Vxtreme is \$65M.

So we are talking total of \$95M cash and \$60M investment which we may/may not get back. I am uncomfortable making call at this level without your explicit knowledge.

If we have to chose one, I would rather chose deal with Robg/PN. Abay & Jim Durking would rather chose a Vxtreme deal. As of tonight, I am pushing forward with a PN deal which will have to get done asap, if we are not to risk losing Vxtreme.

The reason for doing Vxtreme in addition to PN is to remove them from competitor, gain access to their patents, and gain technology infusion in case PN decides to aggressively be in base software business. But I must admit to start getting concerned that we may be overinvesting.

See second mail attached for some discussion.

**Original Message**

**From:** Paul Maritz  
**Sent:** Sunday, June 15, 1997 8:28 PM  
**To:** 'rob@progenet.com'; 'brucej@progenet.com'  
**Cc:** Greg Maffei  
**Subject:** Draft agreement for discussion purposes

Rob - here is the draft as indicated. There are some changes since we spoke (eg. board seat) that can up after discussing things more tonight. I will be meeting with my folks again tomorrow am early. I proposed we meet at 10:30am at Microsoft (Bldg 6), and bring a lawyer. Send me email if you need to change plans.

Thanks.

**Agreement between Microsoft and Progressive Networks on Media Streaming Technology**  
**Confidential - Draft for Discussion Purposes Only**  
June 15, 1997

1. This agreement is entered to this day xx/yy/zz, between Microsoft Corporation ("MS"), a Washington Corporation, and Progressive Networks ("PN"), a XXX corporation, and shall be binding on both parties.
2. Standard Code shall mean the code used in PN's streaming audio and video client and server products, including associated tools, Personal Broadcast Software, and Software Development Kits, for all operating system platforms, including all versions of Microsoft Windows, all versions of UNIX, the Macintosh operating system, and the WebTV operating system. It shall also include all third party code included in the foregoing products. It shall also include all associated documentation, specifications, and tools developed by PN, necessary to build and create derivative works of the code. Standard Code does not include code PN's "Splitter" products or for its for-fee client software.
3. PN hereby grants to MS a perpetual, irrevocable, worldwide, non-exclusive, fully paid-up license to Standard Code in source and binary form. This license shall include the rights to create derivative works,

and to use the Standard Code in source and binary form in any way. The license shall also include the right to sublicense, and further grant the right to sublicense, and otherwise distribute, the Standard Code, in source and binary form, and derivative works thereof. If PN does not have sufficient rights in third party code included in Standard Code, to grant the foregoing rights, then PN shall so notify MS, and shall grant MS all the rights which it can grant, and shall facilitate (including paying up licenses at PN's expense, and/or lifting exclusive licenses as appropriate) MS obtaining fuller rights from such third parties.

4. On a date within 180 days of signing this agreement, such date to be set by MS at its sole discretion, PN shall make delivery to Microsoft of the Standard Code. At that time, PN shall deliver to MS, PN's latest version of Standard Code, including works in progress. PN shall also provide MS with six man-months of free consulting help by knowledgeable PN employee's to train MS on how to build and create derivative works of the Standard Code.
5. MS shall have the option, at its sole discretion, of receiving two further deliveries, with associated six months of free consulting, of PN's latest versions of Standard Code, including work in progress, during the two years following the date of the above delivery, for an additional fee of \$25 million dollars for the first optional delivery, and \$30 million for the second. MS shall decide the dates for such deliveries at its sole discretion. If such deliveries are made, then the code delivered shall be considered Standard Code for purposes of this agreement and shall be subject to all the terms of this agreement.
6. PN shall grant Microsoft a worldwide, perpetual, irrevocable, non-exclusive, fully paid-up license to use the trademarks "Real Audio" and "Real Video" with MS products which incorporate Standard Code, or which use PN specifications, or which are compatible with Standard Code.
7. PN shall grant Microsoft a license to create and distribute products, not restricted to products including Standard Code, using PN's patents, that have been granted, applied for, or which may be applied for in the next five years.
8. PN shall grant Microsoft access to, and the right to create products conforming to, the specifications of any PN product, not restricted to products including Standard Code, that have been created or which may be created in the next five years. Such specifications shall include specifications for API's, protocols, and formats.
9. In the event that MS is sued by a third party, PN agrees to assign sufficient rights to MS to enable MS, at its sole discretion, to counter-sue such third party, and for MS to control such suit.
10. MS and PN shall work in good faith to conclude promptly the agreement currently being negotiated to align media file formats, and client technology.
11. For three years after signing of this agreement, MS agrees to negotiate in good faith with PN for a binary distribution license to MS created derivative works of Standard Code with terms no less favorable those granted to other resellers of MS software.
12. In consideration for the above rights, MS's sole financial obligation, unless explicitly provided otherwise, shall be to pay PN the sum of \$30 million dollars. Of this sum, \$20 million shall be paid within 30 days of signing this agreement, \$10 million shall be paid on satisfactory delivery of the Standard Code to MS.
13. If within three years of signing this agreement, PN licenses all or a substantial portion of the Standard Code in source form for other than escrow purposes, or provides a royalty free binary license to the server portions of the Standard to a third party, then Microsoft shall be entitled to a refund of all monies paid for delivery of Standard Code.
14. PN agrees to sell to MS non-voting preferred stock, convertible into voting or non-voting common stock (at Microsoft's option), equal to a 20% interest for a sum of \$60 million to Microsoft, and Microsoft agrees to purchase it.
15. PN will grant Microsoft a five-year option to purchase for \$100 million an additional interest in PN (which will be on voting or non-voting stock at Microsoft's option) equal to 20% of the fully-diluted stock after the exercise of the option.
16. As long as Microsoft holds at least 5% of the fully-diluted stock of PN, at Microsoft's option, PN will offer a Microsoft designee a seat on the PN Board of Directors or the right to be an observer to the PN Board of Directors.
17. The terms of this agreement shall be confidential, and not disclosed by a party to this agreement without express consent of the other party. The timing and content of an announcement of this agreement must be jointly agreed.
18. If a competent court or government entity shall strike down any particular term of this agreement, the rest of the agreement shall continue in full force and effect.
19. If there is disagreement about the meaning of any term of this agreement, or about the obligations of the parties in this agreement, the parties agree to promptly submit the disagreement to binding arbitration,

- whereby each party shall pick an arbitrator, and the arbitrators shall pick a third, and the majority vote of the arbitrators shall decide.
18. MS and PN warrant that they have sufficient right and title to enter into this agreement.
  19. Usual disclaimers, limitations of liability, etc.
  20. The laws of the State of Washington shall govern this agreement.

—Original Message—

**From:** Paul Maritz  
**Sent:** Sunday, June 15, 1997 9:04 AM  
**To:** Anthony Bay; Greg Maffei; David Rinn; Jim Durkin  
**Cc:** Bob Gomulkiewicz (LCA); Bill Gates  
**Subject:** PN & Vxtreme - Sunday call, attorney-client confidential

We took Robg through the "lets do both" scenario yesterday, with somewhat predictable results. He says he will never do a deal where we first do a deal with Vxtreme - reason being if there code base gets entrenched the level of risk to him of not being able to build value on top of it, have decent transition, new players in equation, etc. gets too high.

We articulated back our dilemma that (i) if we do deal with him first, then doing Vxtreme deal may be impossible, mainly for regulatory concerns, possibly for people concerns, and (ii) Vxtreme is on the block, they will not sit around for long period. So we could end having neither PN, nor Vxtreme.

On the other hand, I must admit that in the absence of an IP concern, and if we could be confident to get it done, I would rather do a "Proposal 1" PN deal. Reason being that Vxtreme's assets are really at the 56K+bit video space, and for a long it took to move Novell. We can re-build/buy equivalent assets to Vxtreme ourselves, if we have time. So this comes down to assessment of:

1. Vxtreme IP - how serious is it? Hard to know as we have not done close due diligence, but they make big claims. If Vxtreme gets bought by IBM or even Oracle, I worry a whole lot less (unfortunately it will miss our x-license window with IBM, but we will come to some arrangement with IBM). So danger is if Nscp busy Vxtreme (worry some), or if they get bought by some "entrepreneurial outfit" (seems unlikely??).
2. Recreating Vxtreme scaleable codec asset - are other companies working on this?
3. Complexity of doing a deal with Robg. Do we get it done or not. We would have to basically get the key elements of a deal done on Monday, or risk losing Vxtreme.

I think we should focus on these three topics for 12pm call.

Wrt complexity of doing deal with Robg, issues are:

1. We would have to get unfettered access to use Real Audio/Video with our products, and they cannot create "Better Real Audio" without giving it to us too.
2. We have to be aligned on protocols/formats. They claim that they are signing up to do this via the "Chris Phillips" discussions. But what is the stick to keep them aligned. They could want lots of "outs" on this.
3. We have to decide how to handle UNIX (default is that we get the code and market it too).
4. They want to keep their splitter technology out now. I think it is OK, but we have to crisp.

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Karl Neumann (LCA)

**From:** Paul Maritz  
**Sent:** Tuesday, June 17, 1997 8:16 PM  
**To:** Bill Gates; Greg Maffei  
**Cc:** Cory Van Arsdale (LCA)  
**Subject:** PN deal signed attorney-client confidential

We signed the PN deal. Both sides have until Monday to back out  
has right to back out if he can't get shareholder approval).  
At this point (per earlier mail), we will start moving on Vxtreme.

PRIVILEGED  
MATERIAL  
REDACTED

and Robg

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Karl Neumann (LCA)

**From:** Paul Maritz  
**Sent:** Monday, July 14, 1997 3:18 PM  
**To:** Anthony Bay; Bob Muglia (Exchange)  
**Cc:** Jim Allchin (Exchange)  
**Subject:** FW: Progressive Networks

fyi

—Original Message—

**From:** Greg Maffei  
**Sent:** Monday, July 14, 1997 3:02 PM  
**To:** Paul Maritz; Bill Gates  
**Cc:** Christine Turner; Kay Barber-Eck  
**Subject:** RE: Progressive Networks

I completely agree with Paul's view about needing to view them as potential competitors. Their business model without server revenue (i.e., plus-clients, content-hosting, value-add on servers) looks very thin. They had \$7m of revenue in Q1CY with about 60% from servers. This does not support the \$300m valuation at which we invested, nor the \$225m valuation they got in their September financing. They may find other business opportunities, but I think they will be tempted to muck around with us.

—Original Message—

**From:** Paul Maritz  
**Sent:** Monday, July 14, 1997 9:58 AM  
**To:** Bill Gates  
**Cc:** Greg Maffei; Christine Turner; Kay Barber-Eck  
**Subject:** RE: Progressive Networks

I can come over for a few minutes between 12:30 and 2pm if needs be.

To summarize deal again very quickly:

- we pay PN \$30M and make \$30M investment (10%)
- we get snapshot of their RAV/RV4.0 code base - all platforms, client & server, rights equivalent to ownership, source and binary.
- we get right to use trademarks RAV/RV with RAV/RV 4.0 compatible products
- we get options of 2 further snapshots (1<sup>st</sup> & 2<sup>nd</sup> anniversaries) for \$25M and \$35M.
- PN gets one year access to Netshow source for purposes to porting to UNIX.
- Licenses are non-exclusive (both ways), but we get money back if PN licenses source to other parties.
- Patent cross license in streaming media area.

The short answer to "will we compete with them in audio/video servers" is complicated. The probable answer is "yes". The rationale behind the deal was that Robg recognized that we were going to step up our efforts, and decided that if we were going to be serious about competing, then he wanted us competing with "his technology" so that it would be easier for him to move to selling "value-add" on top of the "base platform" being sold by MS (even though we have not committed to how we will actually use "his" technology). Hence he has sold us snapshot of his technology. So in this sense, Robg expects to not compete with us. However, It is complicated because all of us have hard time figuring a "value-add" or non-base s/w business that can yeild \$300+M valuation, so we expect that Robg will have hard time giving up on base software business, and may try to figure out ways to get our stamp of approval and then do further proprietary things to stay ahead of us. So I have been consistent in saying to our development group that we have to really pull out all the stops to get a Netshow product out that is RAV/RV compatible, and "use his stamp of approval" to aid us, and really give him no option but to look for new businesses. We have window of opply we must hit.

—Original Message—

**From:** Bill Gates  
**Sent:** Monday, July 14, 1997 9:46 AM  
**To:** Paul Maritz  
**Cc:** Greg Maffei; Christine Turner

**Subject:** Progressive Networks

I have my meeting with Rob today.

Although I want to talk about the Internet in general I need to understand our deal with them better. Maybe I should read the contract or maybe there is a summary somewhere.

Will we compete with them on audio/video servers on NT? This is the part I don't understand and its fairly important.

Christine - there may be someone else who can brief me on this. Its fairly important I get smart before 2pm.

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**From:** Craig Eisler (Exchange)  
**Sent:** Tuesday, March 02, 1999 3:26 PM  
**To:** Greg Carpenter's Windows Media Team; CSD UE NetShow/NetShow Theater Team;  
**Subject:** Windows Media Services Globalization; Network Multimedia Team All; WMT Strategy  
 Review with BillG on 2/26/99

As most of you know, we had a review with Bill last Friday. Along with BillG, SteveB and PaulMa were there. We covered where we are in the market today, where we are with V4, where we are going, and the kinds of things we were proposing in the biz dev and marketing area. I've included an abbreviated version of the slides that we presented at the end of the mail. I've deleted the proposals because a number of them are highly confidential.

This was one of the best reviews I have ever seen with Bill. He is pleased with the progress we have made since the last review we did with him, and is very excited about V4 and the potential that MS Audio has. Overall, Bill is very interested in this space and really gets the importance of digital media to the company. He wants to engage to help us think through the tough problems we face going forward.

**Some highlights:**

- Bill was blown away by our MSAudio codec, and sees that we have a huge opportunity with it.
- After seeing our 300kbps and 700kbps MPEG4 demos, Bill said that he had dismissed ADSL too quickly.
- Bill understood the importance of DRM and supports our efforts in this space
- Bill said that Windows Media needs to be one of Microsoft's "most aggressive areas"

The key takeaway is that our executive staff is behind us, is excited about the work we are doing, and wants to engage to work with us to win. We are going to be going back to see Bill in May for 4 hours to update him on the technology in V4 and V5, and our thoughts for beyond V5. In addition, we are going to be meeting with JimAll every couple of weeks to update him on the technology and to brainstorm with him.

You have all done an awesome job. The review with Bill was successful because of the great job that the entire team has done. The work on v4 and v5 is awesome. Business development, marketing, deployment, and DRG have done an outstanding job of driving adoption of Version 3. The hard work everyone has done is noticed and appreciated by our senior management.

craig



BillG 2-26-99.ppt  
(167 KB)

# Windows Media Technologies

BillG Review

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## Agenda

- Digital Media mission and landscape
- What it means to lose, to win, and a proposed game plan
- Where we are today
- What it takes to win
- Next steps
  - Follow the Challenge Team process
  - Follow-up BillG/SteveB review

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## Digital Media Mission

- To make Microsoft technology the premier platform for networked and standalone PC and Consumer Electronics digital media systems
- To make Microsoft content formats the premier formats for storing, editing, protecting, distributing, and rendering digital media

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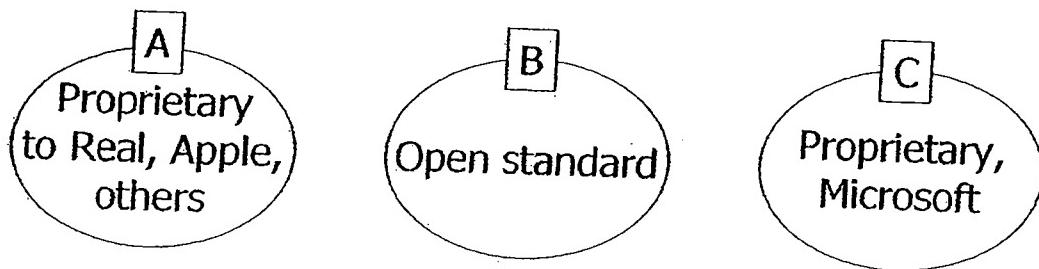
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## Digital Media Landscape

- Availability of unique content drives technology adoption by users and producers, not the other way around
  - Content ::= file format + codecs
- Content formats spectrum



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## Platform Battle is Similar to Netscape, But Different Playbook

- No entrenched open standards (HTML, HTTP)
- No acceptable least-common-denominator
- Rapid changes in technical quality of content
  - Creating radically new business opportunities
  - Driving fast adoption of new technology
- Consumer use model differs
  - Some use two browsers, lots use only one
  - Nearly all use two multimedia players, many use 3
- Consumer Electronics devices are potential king-makers

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## What It Means to Lose

- Real, Apple, and MP3 phenomenon provide the required multimedia runtime on Windows and WinCE
  - Content runtime will drive innovation and standards for tools, consumer app's, and server app's
  - Windows multimedia APIs are no longer the focus of the development community
  - Potential COGS hit to license proprietary technology to get access to content
  - Opening for competing formats in OEM hardware
  - There is no concept of down-level content degradation like with HTML--it's one or the other

■ Real's player becomes the browser of choice

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## What It Means To Win

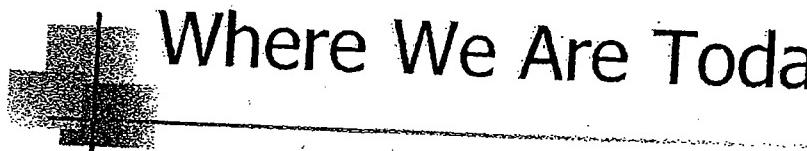
- Windows at center of digital media innovation
  - Increased consumer relevance for PC
  - Maintain PC value vs. "Portal PC" (AOL web PC)
  - Not dependent on 3rd party runtimes or APIs
- New business opportunities for MSFT and 3rd parties
  - New business models for content and services
  - Advantage WinCE for digital appliances
  - Broadband client and server platform
- Enhanced Office/BackOffice functionality for knowledge workers
  - Corporate training
  - Business communications
  - Synchronized multimedia applications

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# Where We Are Today

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# Market Review

## Player Distribution

- 22MM WMP distributed since July
  - Jul'97 – NetShow 2M; Real 10M
  - Jul'98 – WMP/NetShow 5M; Real 30M
  - Jan'99 – WMP 22M; Real 50M (G2 20M)
- WMP and G2 run-rates comparable - 130K to 150K/day
- WinAmp 10MM players; 34K/day
- QuickTime -- on 11,500 CD-ROM titles; 24 MM Windows players

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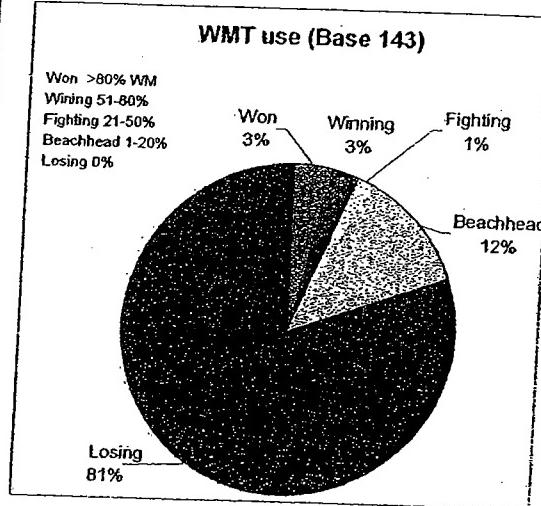
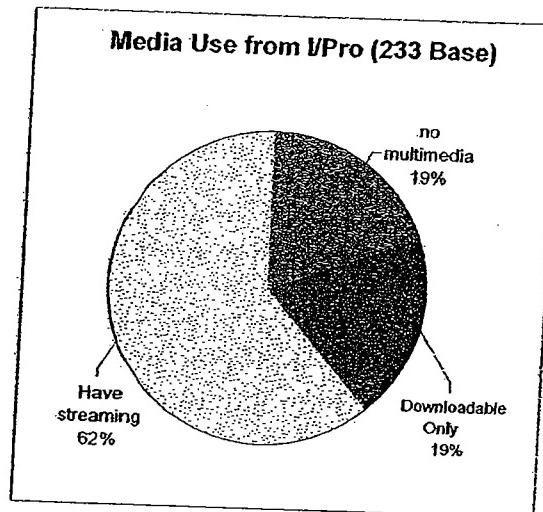
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# Market Review

## Multimedia Content Use on I/Pro Sites



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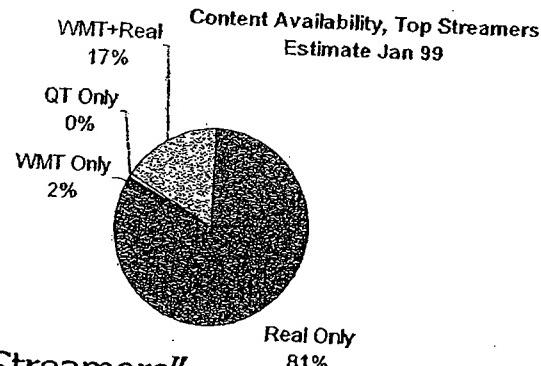
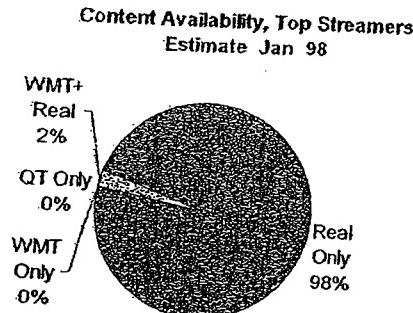
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# Market Review

## ICP Biz-Dev Status and Progress (1 of 2)



- WMT Progress w/ "Top Streamers"
  - 32 deals; 7 ASF-only
  - 19% of streaming content on top 100 sites
  - 74% of recorded referrals come from ICP deals
  - Top news agencies stream share grown to 42-50%
  - Have completed 7 ASF-only ICP deals; ~25 parity deals

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# Market Review

## ICP Biz-Dev Status and Progress (2 of 2)

- WMT biz-dev challenges
  - Real content portfolio is 5+ times WMT -- closes deals
  - Real has us way out-gunned in BizDev/sales resources
  - Enso needs CE & WebTV players; only Real has these
  - Apple - Jobs offered CNN ~\$1.1M to add QuickTime
- Real's biz-dev accomplishments
  - Exclusives: Broadcast, GeoCities, Excite, M2, SonicNet, NBA, Spinner (on AOL CD, but not exclusive)
  - JVs: RollingStone, Film.com
  - 107 compelling sites listed on real.com
  - Momentum and leadership forces us to "catch up"
- Real challenges
  - ICP dislike Real's invasive branding, poor follow through, and conflict between Real's technology and portal biz

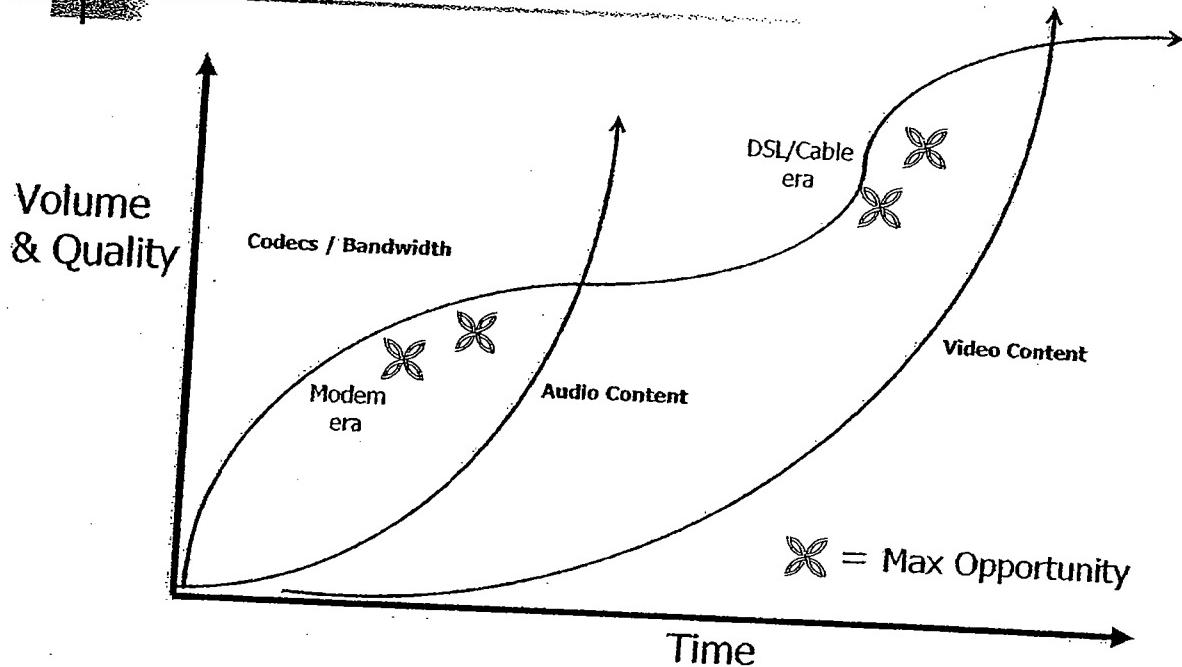
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## Adoption Inflection Points



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## Digital Media Value Chain

- Same as web value chain
  - ICPs
  - SPs
  - ISPs/hosting
  - Corporate .com sites and intranets
  - Portals
- More unique to Digital Media
  - Media content owners
  - Aggregation and hosting sites (broadcast.com)
  - Rights management clearinghouses
  - Encoding shops

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# Market Review

## Corporate

- Good news -- untapped opportunity
  - Most corps only beginning to think about streaming solutions
  - US Web-based training market exceeds \$5.5B by 2002  
(source: IDC)
- Bad news
  - ICU & Msft field/subs not engaged
  - Real reaching accounts first with 30+ dedicated corp sales force
  - Real relationship with Lotus; distribution & future integration
  - Real integration with PPT minimizes PPT 2K
- Example Wins: SAS, SAP, PeopleSoft, Stanford
- Example Losses: Morgan Stanley, United Healthcare & Gap, Boeing

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# Market Review

## RealNetworks

- Market cap: 12/97 \$308M, 2/99 \$2.2B
- Revenue growth: \$33M to \$65M (80% US)
  - Services: \$5M '97, \$15M '98
  - Software: \$25M '97 (\$4.8M from MS), \$47M '98 (\$9.7M from MS)
  - Advertising: \$2.2M '97, \$3.1 '98
- Headcount: 450 Real, 267 MS
  - Sales, Mkt, Biz Dev: 175 Real, 27 MS
- Real family of sites ranked 15th on MediaMetrix

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# Windows Media Technologies

## Release Timeline

- Q2 '99 WMT 4.0
- Q2 '00 WMT 5.0
  - Platform: completely re-architected and fully extensible client and server
  - Synchronized multimedia: superior real-time and off-line authoring tools
  - Digital Rights Management v3
  - Enhance support for Knowledge Worker
  - Complete midband/broadband solution

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# WMT 4.0

## Major Features

- Branded Windows Media end-to-end
- Windows Media Player 6.1
- Multi-bitrate single-file video
- Digital Rights Management v1
- Synchronized multimedia (preliminary implementation of HTML+TIME)
- Windows Media Tools (ODP, Author)
- Enhanced WebEvents

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# WMT 4.0

## Major Features (cont'd)

- MS Audio codec w/user-adjustable EQ
- Improved MPEG-4 codec, w/user-adjustable saturation, contrast, and brightness
- PowerPoint 2000 broadcast server-side support
- Pay-per-view solution
- Windows Media Event Guide solution (corporates)

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# WMT 4.0

## MS Audio Codec

- Proprietary codec w/seven filed patents
  - Range of 6 to 128 Kbps, mono and stereo
  - Stereo 44 kHz sampling at 20 Kbps+ data rates
  - Equivalent quality to MP3 and G2 at 50% of bitrate
- Quality
  - Quantum leap improvement over RN G2 codec and our own Voxware
  - Far better frequency response results in much richer sound
- Speed
  - Up to 10 times faster encode than Voxware codec

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# WMT 4.0

## MPEG-4 Video Codec

- 12 Kbps to 10 Mbps data rate
- Improved playback quality using post-processing filters
  - Removes blockiness and "ringing"
- Highest encoding speed in the industry
  - 33% faster than Intel codecs in RN encoder
- Filed 15 patents on base algorithm

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# WMT 4.0 vs G2

- We Win

- Digital rights management
- Server admin, scale, multicast, reliability
- Player programmability, playlists
- High-bandwidth video
- Solutions
  - Commerce integration
  - Event guide template
- Radio toolbar in IE 5
- PowerPoint integration
- Audio quality & range
- Multi-processor encoding

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- Tie

- Quality of low-bitrate video
- Bandwidth management
- Multiple datarates in single file (video)
- Encoding performance
- Encoder ease of use (templates)

- We lose

- X-platform players (late & less functional)
- Synchronized multimedia (IE5 dependency, Win32 only)
- Audio/video editing
- Multiple datarates in single file (audio)
- Client user interface & extensibility

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# WMT 4.0 vs. Apple QuickTime

- We Win

- Mature streaming platform
  - Server
  - Network protocols
  - Streaming file format
- Digital rights management
- Solutions
  - Commerce integration
  - Event guide template
- PowerPoint integration
- Audio range
- Video quality and range
- Synchronized multimedia
- Client user interface & extensibility

- Tie

- Internet audio quality
- X-platform players

- We lose

- Mature audio/video platform SDK (API, x-platform)
- Mature audio/video editors (e.g. Premier)
- Content on the web in their format
- Mindshare of the media authors

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# WMT 4.0 vs. MP3

- We Win

- Audio quality < 128 Kbps
  - Equivalent quality at ~50% data rate
  - Streaming
- Potential lower-cost codec licensing model
- Mature File Format
- Mature streaming platform

- Tie

- Audio quality  $\geq$  128 Kbps

- We lose

- Consumer momentum
- Developer mind-share
  - Large number of encoders & players
- Quantity of music in MP3
- Client UI & extensibility
- CD Rippers
- H/W Devices (e.g. Rio)
- Perceived to be an "open" standard

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# Plan to Win

- Deliver competitive product, focus company
  - Ship 4.0
  - Communicate imperative to win
  - Engage Microsoft Sales
- Execute a winning product strategy
  - Cool UI
  - Secure content (DRM+InterTrust)
  - Competitive codecs
  - Ride the audio wave (including MP3)
  - Own the video wave (midband/broadband inflection)
  - Acquire/build powerful tools
  - Best client/server multimedia platform
- Invest in content providers, infrastructure, and Marketing
  - Providers: record labels, artists, radio stations, encoding houses
  - Infrastructure: Broadcast.com, cable/telcos, Qwest
- Figure out Consumer Electronics plan and partnerships

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# EXHIBIT 2

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**From:** Mike Beckerman  
**Sent:** Wednesday, December 26, 2001 7:18 PM  
**To:** Amir Majidimehr; Will Poole; Bill Gates  
**Cc:** Jim Allchin; Chris Jones (WINDOWS); Rick Rashid; Anoop Gupta (RESEARCH); Craig Mundie; Sam Furukawa  
**Subject:** RE: DMD Marketing Update - December

More answers below.

-----Original Message-----

**From:** Amir Majidimehr  
**Sent:** Tuesday, December 25, 2001 11:40 PM  
**To:** Will Poole; Bill Gates; Mike Beckerman  
**Cc:** Jim Allchin; Chris Jones (WINDOWS); Rick Rashid; Anoop Gupta (RESEARCH); Craig Mundie; Sam Furukawa  
**Subject:** RE: DMD Marketing Update - December

Answers below.

Amir

-----Original Message-----

**From:** Will Poole  
**Sent:** Monday, December 24, 2001 11:03 AM  
**To:** Bill Gates; Mike Beckerman; Amir Majidimehr  
**Cc:** Jim Allchin; Chris Jones (WINDOWS); Rick Rashid; Anoop Gupta (RESEARCH); Craig Mundie; Sam Furukawa  
**Subject:** RE: DMD Marketing Update - December

Answers below. Mike and Amir, a few questions for you also.

Bill, we're planning to fully announce Corona, including Beta shipment of player and encoder, and a bunch more deals, at NAB in April. I'm sending you a separate email to see if you could keynote there and highlight the importance of Microsoft's efforts for the broadcast industry which is increasingly looking our way for leadership.

-----Original Message-----

**From:** Bill Gates  
**Sent:** Sunday, December 23, 2001 12:00 PM  
**To:** Will Poole  
**Cc:** Jim Allchin; Chris Jones (WINDOWS); Rick Rashid; Anoop Gupta (RESEARCH); Craig Mundie; Sam Furukawa  
**Subject:** RE: DMD Marketing Update - December

I need to understand Corona better.

I looked at the slides and some of the keynote speech and all of the press stuff including the articles but I am still confused about Corona.

It seems strange to me that we are release two new Codecs right AFTER we shipped Windows XP.

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Δ π EXHIBIT 1  
 Deponent *Beckerman*  
 Date 11/4/03 Rptr. *Mills*

[WPoole]

- [WPoole] These are in preview now, go to beta in April, ship early summer. We have traditionally been on a 9-12 month release cycle with codecs to keep up w/ and ahead of Real, apple, etc.
- [WPoole] 2 channel audio WMA v9 codecs will be fully backwards compatible to Xp, v7, etc.
  - [WPoole] The new 5.1 WMA will work on XP only, requiring a new Corona player.
  - [WPoole] v9 Video is backwards compatible after a codec auto-install (same as we've done since 6.4).

[mike] Meaning that the bitstream is different from our v8 and earlier video codecs, but the players going back to 6.4 all know how to request a new codec from our codec server when they encounter content that was encoded using the new codec.

- [WPoole] Other new codecs are also part of Corona, but are not announced yet. They include a low-bitrate voice codec for spoken word, news, and future VTC use; a perceptually-lossless mode of WMA (basically peak-constrained variable bitrate audio), and a mathematically lossless audio codec (for pro archival use, and next generation "disk space does not matter, give me the best" consumer use).

Will these Codecs be part of the feature portion of SP1?

[WPoole] Everything in Corona will be in SP1, including codecs. The Corona player is required to take full advantage of the Corona server in Windows.NET, and we have to update the client to address consent decree issues. [not that the server will work with downlevel players, but will not have all the new protocols available, etc.] Mike, pls confirm.

[mike] The server, Hercules, is in Windows.NET. The client and the encoder will not be part of SP1 as they have significant feature improvements and thus do not fit the definition of a service pack. Also, the Corona client schedule does not complete early enough to make the SP1 schedule, regardless.

Will they be part of MSN 8?

[WPoole] Bigtime. Texas depends on Corona for a variety of new capabilities (which we are fully in sync with and supportive of), including "buddy boogie" and others.

[mike] Correct. We work very closely with the Texas team.

I don't understand Faststream – is it just optimistically assuming the network works ok for the first part of the video?

[WPoole] Correct. This makes a huge difference in the startup experience, and nobody else has done it. Current systems (ours, apple, real) do not opportunistically use excess bandwidth for startup or pre-caching. Corona [server, in Windows.NET] will do both, meaning that startups can be nearly instantaneous on a cable modem, and congestion induced re-buffering during stream playback will be reduced. Users love this feature.

[mike] There are been two instances that I'm aware of where others have tried some form of taking advantage of excess bandwidth: Real, and Burst. Real has pumped data out at stream start-up in rates in excess of the stated bandwidth for the stream since the release of Real Video (v5), but the experience isn't really much better than our currently shipping WMT components; they really haven't done much in this area for 3 years now. Burst was a company that copied our protocols and used a proprietary means to take advantage of excess bandwidth such that the experience was improved over our out-of-the-box performance. They have since gone out of business.

FastStream is an umbrella term for four functions that are designed to provide a superior user experience for broadband connections. Users connected at as low of a rate as 56K could see some improvement as well, though that will be highly dependent upon the bandwidth of the stream they're playing and on the activities they're attempting in parallel that consume network bandwidth. We believe we have innovated here in ways that are significantly different than either Real or Burst, and are far more effective.

With our current shipping server, we always deliver content metered at the authored rate. The first function of FastStream is that we push down content faster than the authored rate (actual rate configurable at the server.) This gets the stream going on the client very quickly. We have demoed over the Internet the experience of switching between multiple content streams (such as preview clips from Intertainer) and it is incredibly compelling – when it's working well it's like switching

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channels on a TV; instantaneous.

The second function is that we monitor network throughput over the course of the stream and we adjust as appropriate to try to always keep a on the client a certain delta ahead of the current time. Obviously, this helps clean up typically network jitter.

The third function is that we have improved our UDP packet resend mechanism to greatly increase the chances of still having a requested packet on the server at the time the client requests a resend. Essentially, we greatly increased the server-side stream buffer for UDP-based streams. This helps clean up much of the typical UDP network packet loss we've measured and observed over the years.

The fourth function is client-side disk caching of the stream. In conjunction with the previous three and given sufficient local disk space, we try to build up a cache of the content such that if you're say 3/4ths through a movie and you lose the network connection all together, you still get to see the complete movie w/o interruption.

Together these FastStream functions deliver a superior broadband experience over any current shipping streaming media delivery system.

I don't understand the new audio codec. Who gets a benefit from it? Will people encode in it? [WPoole] Per above, the audio codecs will be broadly distributed and used. We have had good pickup by ICPs of each new generation of audio codec since they have been bitstream-compatible going back 2+ years, and are compatible with 80+ models of existing PDs and pocket PCs, old media players, etc. The 5.1 audio will be used by aggregators [such as moviefly, intertainer, movies.com] doing VOD applications, and by studios for next-generation movie products that will include 3+ high quality movies on a single DVD for playback on a media center PC and/or individual downloaded movies saved on a CD/R (we can get a VHS+ quality movie w/ 5.1 surround in <700MB).

I don't understand the new video codec. How does it relate to Mpeg4? It is better because it is proprietary but I don't understand the rest of it.

[WPoole] This is another generation the video encoding technology we've been working on in the past. At this time it is long diverged from MPEG4. (We do still support ISP MEG4 encode and decode). We're now getting really good at high quality encoding, and we're blowing away the studios and broadcasters with our ability to deliver near-DVD quality at fast DSL speeds (< 1mbit), and deliver HD quality at < 1/3 the datarate/size of MPEG2 (and better than 50% improvement over ISO MPEG4). The key thing that grabs studios is that we can get a highdef movie on a current generation DVD. The Japanese are pushing blue laser technology to go to ~30GB DVDs to store mpeg2 highdef. If we play our cards right, and figure out how to apply studio-acceptable security (be it ours or CSS or other) to the media for non-PC as well as PC use, and continue to get DVD player manufacturers behind us, we can potentially move WMV into the position of being the standard format for highdef DVD distribution. There are a lot of moving parts that need to be aligned to make this work, but we're laying the foundation and have a chance based on the video quality we're showing in Corona.

[WPoole] We will be announcing at CES that the #2,3,4, and 5 DVD player manufacturers [as measured by US market share – Sony is #1] will all be including WMA playback in their next generation players. We've licensed them for video also, but don't have commitments yet b/c of the need for new silicon. Once we have the video decode in silicon problem licked, we should be able to start to deliver on the idea above, hopefully by CES 03.

There is even another standard besides MPEG2 people talk about.[WPoole] There is a new video encoding std making its way through the bodies, but it is a long ways off, from both the standardization process and the CPU required to support it. Amir, pls explain the ITU/MPEG4 effort:

[Amir] ITU 26L is a next generation video compression standard that improves substantially on

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existing standards such as MPEG-4. MPEG has adopted this activity and will basically be rubber stamping 26L as "MPEG-4 part 10". This compression scheme however, is 100% incompatible with current MPEG-4 standard. While 26L provides very good quality, it does so by using considerably more CPU horsepower on both encode and decode. Our new "Corona" Windows Media Video codec achieves similar efficiency to 26L but uses substantially lower amount of CPU cycles. We do not expect 26L to become a factor in the marketplace for another 2 to 3 years due to licensing and CPU overhead issues.

Do we want people like EchoStar to use these new formats or will they just stick to Mpeg2?  
 [WPoole] The satellite guys are going to be very hard to move off of MPEG2 for all the obvious reasons. Before we can even take a run at them, we need to have affordable WMV decide in silicon, in ASTBs that are ready for deployment reasonably soon. I have a number of meetings at CES to push this initiative forward, with Thompson and others. We have 3 silicon providers actively engaged, as well as Equator, who has a high performance media co-processor that does mpeg2 and other decoding in software, and would be much quicker than the full silicon spins required for others. We probably also need to figure out a standards play with WMV to get that kind of adoption. I will set up a review for February to get together with you and the CC line (and jonde, miketout, etc.) and go over our long term plans around video encoding and standards and get some feedback on how to best position ourselves for success.

I need to understand the encode/decode overhead for the various things.  
 [WPoole] Without knowing exactly what you're looking for, here are a few datapoints:

- 640x480 30fps WMV9 encode takes about 90% a 2GHZ P4 to do in real time.
- Decoding the hightdef video we showed in NY took a dual proc ~1.8 plus a very fast graphics card.

[Amir] Actually, we can do this on a \*single CPU\* 1.8Ghz AMD CPU. The current Tech Preview code is not fully optimized and hence the need for dual-processor configuration for the show.
 

- All of this will get MUCH cheaper once we have hardware encode and/or decode. For eHome Slalom, we're looking at a hybrid two-pass encode, where a cheap pre-processor does a partial real-time encode, CPU copies to disk for immediate use in trickplay, and then does a full encode in the background to save disk. This gives the best of both: cheap and immediate high res capture, and storage of high quality with limited disk space, which will be a great selling feature over dedicated PVRs with mpeg2 only and big expensive disk packs (compare to the recently announced Replay 4000/320 that costs \$2,000 and has 320GB of disk -- we'd be able to get the same quality & quantity on a Slalom-era media center PC with 80GB of disk.)

How does any of this relate to MSR China stuff?

[WPoole] Amir should address what exactly we've taken in from MSR for this release.

[Amir] We did not use any technology from MSR (China or otherwise) in this area. MSR China's work is currently focused in other areas such as fine grain scalability. They do not work on our own audio and video compression technologies.

I thought the next generation included fast viewing and I don't see that at all (speed up).

[WPoole] Corona includes time compression at encode time. I don't recall how much of the speed-up / playback-time compression made the release. Mike/Amir?

[Amir] Mike has to answer since this is really a player feature. But yes, we have had the encoder side features for quite a while.

[Mike] The Corona client will include pitch-corrected variable speed playback (but not pause removal.) We haven't announced anything yet related to the encoder or the new client, so that's why you haven't seen anything about this in the materials we've published.

-----Original Message-----

**From:** Will Poole

**Sent:** Friday, December 21, 2001 1:53 PM

**To:** Jim Allchin; Steve Ballmer; Bill Gates

**Cc:** Jeff Raikes; Brian Valentine; Chris Jones (WINDOWS); Bill Veghte; Todd Warren; Will Poole's Direct Reports

6/6/2003

MS-CC-Bu 000000093296  
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**Subject: FW: DMD Marketing Update - December**

FYI – DMD is rockin' with consumers, enterprise, press, and industry. Dave's team is kicking ass promoting all the new technologies DMD has out this fall, and the customers are eating them up, world-wide.

A few highlights from below:

- \* Corona (v9) announced – we cleaned up in the press
- \* DVD penetration – we have licensed WMA (and in some cases WMV) playback to suppliers to 90% of current DVD players
- \* Plus: 346,000 units at retail, 10% over plan
- \* Media Player is #1 in US MediaMetrix reach, home & work; internationally it is ahead or tied in 9 of 10 countries surveyed (behind in France).
- \* Making more progress than even on content supply on top sites; leading Real on top-10 US sites
- \* Producer: 142,000 downloads in under a month!
- \* Sable solution shipped and off to a great start

6/6/2003

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